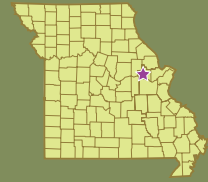


# Missouri River Hills

Conservation Opportunity Area



Ozark  
Highlands



*An unusual band of St. Peters sandstone meanders through the Missouri River Hills creating impressive glades, canyons, cliffs, chutes and waterfalls such as this one located in Razor Hollow Natural Area on Daniel Boone Conservation Area.*

Gus Raeker

The Missouri River Hills landscape is the largest contiguous block of forested land north of the Missouri River. Serving as the boundary where glaciers once met the Ozarks, the tallgrass prairies from the north transition into the rugged forest hills and this greatly influenced the wildlife of the area. Today the Missouri River Hills still support an interesting mosaic of forests, woodlands and glades. A drive along Highway 94 provides terrific views of dramatically rolling hills and impressive limestone cliffs rising above the Missouri River floodplain.

The Missouri River Hills is home to 18 or more species of amphibians, including three species of conservation concern: Ringed salamanders, Wood frogs and Four-toed salamanders. The area also provides important

habitat for a large number of songbirds, including both forest interior and early successional species. The landscape is home to Missouri's best if not the only remaining population of ruffed grouse. Unusual plants include false mermaid, false yellow mallow, prairie dandelion and the endangered running buffalo clover. The Lost Creek watershed is considered a priority watershed due to its high quality stream and the fish, mussels and crayfish that live there.

The area is geologically interesting, as an unusual band of St. Peters Sandstone meanders through the river hills. Impressive waterfalls, chutes, cliffs, canyons and glades can be found along many of the creeks throughout the Missouri River Hills.

## Missouri River Hills Conservation Strategies

- Restore and maintain forest, woodland, glade and stream natural communities.
- Use outreach and education opportunities to highlight management activities.
- Eliminate unwanted invasive plants (e.g. autumn olive, bush honeysuckle and garlic mustard).
- Pursue conservation easements and use other innovative approaches that will keep large blocks of forestland intact.
- Encourage sustainable forest management to provide a diverse age structure to forests.



Gus Raeker

*Heart-leaved plantain, a former candidate for federal listing, has seriously declined in most of its historic range but is still relatively secure in the Missouri River Hills COA.*

### Priority Research and Inventory Needs

- Inventory and monitor Species of Conservation Concern
- Identify populations of invasive species and implement control options.
- Monitor bird response to natural community management.
- Conduct ruffed grouse habitat suitability study and continue annual drumming survey on public land.
- Continue research on management practices to determine the best ways of restoring and maintaining natural communities.
- Conduct research into the socio-economic needs of private landowners as they make land use planning and management decisions.

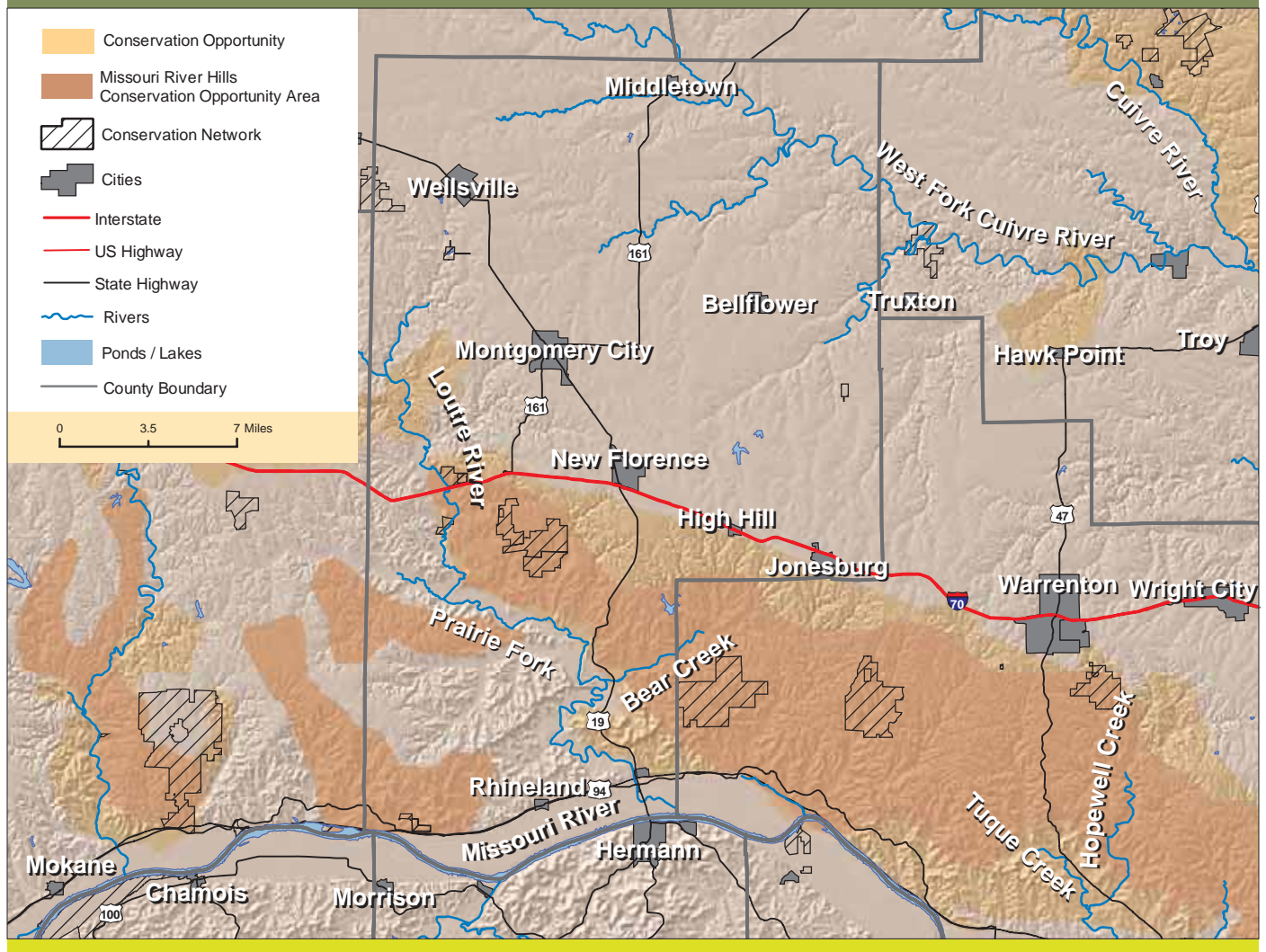
### Conservation Partners

**Existing:** Ruffed Grouse Society, Audubon Society of Missouri, The Nature Conservancy, National Wild Turkey Federation, Missouri Conservation Heritage Foundation, US Fish and Wildlife Service, Natural Resources Conservation Service, Missouri Department of Natural Resources, Missouri University, US Forest Service, Missouri Department of Conservation

**Potential:** Central Electric Cooperative, Ozark Regional Land Trust, Greenbelt Land Trust, Audubon Missouri, Quail Unlimited, Missouri Prairie Foundation, St. Louis Audubon, Columbia Audubon, Stream Teams



## Missouri River Hills Conservation Opportunity Area



### Funding Sources

**Existing:** AgNPS SALT, National Fish and Wildlife Foundation, NRCS private land programs (CRP, WHIP, EQIP and TSP), National Wild Turkey Federation, Wildlife Diversity Fund, Missouri Conservation Heritage Foundation grants, US FWS Landowner Incentive Program, US FWS Partners for Fish and Wildlife Program, Missouri Bird Conservation Initiative grants, Ruffed Grouse Society, Missouri DNR annual budget, MDC annual budget, MDC private land cost share program

**Promising Future Sources:** US Forest Service, Audubon Society of MO, BASF Corporation, AmerenUE

*Although once fairly common, Ruffed grouse have vanished from most of Missouri. A population remains in the Missouri River Hills COA, and considerable work is being done to stabilize and increase their numbers.*

### Existing Conservation Network

Daniel Boone Conservation Area, Danville Conservation Area, Grand Bluffs Conservation Area, Little Lost Creek Conservation Area, Reform Conservation Area, Reifsnider State Forest, Katy Trail State Park, Graham Cave State Park, Loutre Lick CA, Moore's Mill Conservation Area.

Jim Rathert





## Woodland Management



Gus Raeker

*Non-commercial thinning and prescribed fire are being used to restore this and other woodlands at Daniel Boone Conservation Area and throughout the Missouri River Hills COA.*

### Conservation Challenges

Over 50 years of fire suppression and unsustainable forest management has allowed many woodlands and glades to become overcrowded with trees, develop a heavy presence of fire intolerant species (such as sugar maple), and eliminated much of the herbaceous vegetation growing on the ground. Non-commercial thinning and prescribed fire are being used to restore this and other woodlands at Daniel Boone Conservation Area.

The primary challenges in the Missouri River Hills Conservation Opportunity Area will be to find sufficient funding to manage and restore forest, glade and woodland habitats. Equally important is to educate landowners about sustainable forest management practices, to reduce or eliminate threats by exotic species, and keep this large block of contiguous forest land relatively intact as development and urbanization moves into this landscape.

To learn more about the Missouri River Hills Conservation Opportunity Area, please contact:



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